

SECTION 11215**SUMP PUMP****PART 1 - GENERAL**

1.01 SCOPE

The Contractor shall furnish and install sump pump and all appurtenances, as specified below, where shown on the plans or as required for a complete installation.

1.02 SUBMITTALS

The Contractor shall furnish full detailed manufacturer specifications, characteristic curves and shop drawings showing the make, model and descriptive data to the Department for the pump unit he proposes to supply. Submittals shall be approved prior to installation of pumping unit.

PART 2 - PRODUCTS

2.01 SUMP PUMPING UNIT

- A. Sump pump in the dry-well shall be a submersible type with a cast iron or bronze housing, by Barnes, Covert Pump Division, or approved equal. Pump shall be rated for duty in conditions it shall be subjected to, including being totally submerged. Unit shall contain mechanical seal with rotating carbon face and stationary ceramic face. The motor shall be single phased, oil-filled unit, with overload protection and maximum ½-horsepower. However, sump pumps installed in dry wells ranging from 20 feet to 24 feet depths are excluded from this requirement and shall meet Department approval.
- B. Sump in shall be sized per sump pump manufacturer's recommendation, but unless approved, not less than dimensions shown on the Department's Standard Pump Station Drawings. Dry-well sump shall include space for external float switch. Float switch shall be furnished with 10 feet cord and piggyback plug.
- C. Where installed in valve-pit, sump pump shall be 1/3-horsepower, single phase, oil filled unit, with overload protection. Unit shall be Series BP27, by Barnes, or approved equal.

PART 3 - EXECUTION

3.01 INSTALLATION

- A. All equipment shall be installed as shown on the approved plans.
- B. Installation shall include furnishing all necessary wiring, piping and other necessary appurtenances for satisfactory operation and making final adjustments to place the equipment in operable condition.
- C. All power, control and alarm wires as required shall be provided even if not shown on plans.

- D. Installation, testing and start-up shall be as recommended by the manufacturer provided specifications.
- E. Dry-well Installation: Provide a sump and sump pump in the floor of the dry-well in a corner opposite the wet-well. Slope the floor from all directions toward the sump. The PVC pump discharge line shall contain two swing-disk type check valves and a gate valve, and shall be piped to the top of the dry-well before passing through the wall into the wet-well.
- F. Valve Vault Installation: Sump pump and local motor starting switch shall be installed in the valve pit and hard-wired to the control cabinet. Manual motor starting switch shall be NEMA 3, 4X and 12, corrosion-resistant, dust-tight and watertight. It shall be Crouse-Hinds NSSC-D22, or approved equal. Discharge from pump shall be conveyed to the wet-well using 1-1/2 inch diameter PVC pipe. (The Department may consider approval of 1-1/4 inch diameter discharge piping as shown in the Standard Pump Station Drawings.)

END OF SECTION